WHAT IS CLAIMED IS:

1. An injection blow-molded polycarbonate permaware hollow container comprising:

   (a) a base forming the bottom of said container defining an outer edge thereof;

   (b) a sidewall integrally formed with said base extending upwardly from the outer edge thereof and having a thickness of from about over 50 to about 500 mils to a fortified rim about its upper extremity;

   wherein said polycarbonate is a hydrolysis-stabilized polycarbonate.

2. The permaware polycarbonate container according to Claim 1, wherein said hydrolysis-stabilized polycarbonate includes a stabilizer selected from the group consisting of sulfonic acid stabilizers, sulfonic ester stabilizers, sulfonic acid anhydride stabilizers and mixtures thereof.

3. The permaware polycarbonate container according to Claim 1 wherein said hydrolysis-stabilized polycarbonate includes a polyphenylene sulfide resin.

4. The permaware polycarbonate container according to Claim 1, wherein said polycarbonate includes a stabilizer selected from the group consisting of carboxylic acids, carboxylic acid anhydrides and mixtures thereof.

5. The permaware polycarbonate container according to Claim 4, wherein said stabilizer is present in an amount of from about 0.1 to about 30 percent by weight.

6. The permaware polycarbonate container according to Claim 4, wherein said carboxylic acids have a first ionization pKa value in the range of from about 1.0 to 6.5.

7. An injection blow-molded polycarbonate permaware hollow container comprising:

   (a) a base forming the bottom of said containers defining an outer edge thereof;

   (b) a sidewall integrally formed with said base extending upwardly from the outer edge thereof and having a thickness of from about 30 to about 500 mils to a fortified rim about its upper extremity.

8. The permaware polycarbonate container according to Claim 7, wherein said sidewall has a thickness of from about 40 mils to about 100 mils.

9. The permaware polycarbonate container according to Claim 7, wherein the base has a thickness of from about 30 to about 500 mils.

10. The permaware polycarbonate container according to Claim 7, formed from a hydrolysis-stabilized polycarbonate.

11. A method of forming a container having a wall-thickness of from about 30 to about 500 mils, said container having a sidewall extending upwardly to a rim and an integrally formed base, the process comprising:

   (a) forming a moldable injection-molded parison from a hydrolysis-stabilized polycarbonate composition; and

(b) blow –molding said parison in a mold shaped to define said container wherein cooling fluid supplied to said mold is maintained at a temperature of at least about 100°F.

12. The method according to Claim 11, wherein said cooling fluid is supplied to said mold at a temperature of at least about 125°F.

13. The method according to Claim 11, wherein said hydrolysis-stabilized polycarbonate composition includes a stabilizer selected from the group consisting of carboxylic acid stabilizers, carboxylic acid anhydride stabilizers, sulfonic acid stabilizers, sulfonic ester stabilizers, sulfonic acid anhydride stabilizers, polyphenylene sulfide stabilizers and mixtures thereof.

14. A method of forming a durable polycarbonate permaware container provided with a rim, a base portion and a sidewall therebetween comprising:

(a) injecting molten polycarbonate into a mold cavity formed by a mold wall and a core to form a polycarbonate parison on the core;

(b) separating the parison from the mold wall by moving the parison on the core axially in a straight path away from the mold wall;

(c) moving the parison on the core in a substantially arcuate path into axial alignment with a blow mold which is in a side-by-side relationship with the mold cavity;

(d) moving the parison on the core axially in a straight path into the blow mold;

and

(f) expanding the parison on the core in the blow mold at a uniform temperature to form a hollow container having a sidewall integrally formed to a base and a fortified rim, the sidewall having a uniform thickness of from about greater than 50 mils to about 500 mils, wherein said container has a maximum cross-section intermediate said rim and said base portion..

15. The method of Claim 14, wherein the sidewall has a uniform thickness of from about 75 mils to about 375 mils.

16. The method of Claim 14, wherein the polycarbonate is injected into the mold cavity at a temperature of from about 450°F to about 700°F.

17. The method of Claim 16 wherein the polycarbonate is injected into the mold cavity at a temperature of from about 500°F to about 650°F.

18. The method of Claim 14, wherein the molten polycarbonate is injected into the mold cavity at a pressure of about 1,000 to 3,000 psi.

19. The method of Claim 19, wherein the molten polycarbonate is injected into the mold cavity at an injection pressure of about 2,100 psi.

20. The method of Claim 14, wherein the parison is expanded at a uniform temperature of from about 250°F to about 500°F.

21. The method of Claim 20, wherein the parison is expanded at a pressure of from about 100 to about 500 psi.

22. The method of Claim 14, wherein the polycarbonate comprises aromatic homopolycarbonate or aromatic copolycarbonate resins.

23. The method of Claim 14, wherein the polycarbonate has a melt flow rate of from about 10 to 22 g/10 min.

24. An injection blow-molded polycarbonate permaware hollow container comprising:

(a) a base forming the bottom of said container defining an outer edge thereof;

(b) a sidewall integrally formed with said base extending upwardly from the outer edge thereof and having a thickness of from about over 50 to about 500 mils to a fortified rim about its upper extremity; and

(c) wherein said container is of maximum cross-section intermediate said base and said rim.

25. The permaware polycarbonate container of Claim 24, wherein the fortified rim has a thickness of at least 2 mils greater than an adjacent portion of the sidewall over a height of at least 2 mils.

26. The permaware polycarbonate container of Claim 24, wherein both width and height of the fortified rim are from about 1.1 to about 4 times a thickness of an adjacent sidewall.

27. The permaware polycarbonate container of Claim 26, wherein both the width and the height of the fortified rim are about 100 mils and the adjacent sidewall is about 80 mils.

28. The permaware polycarbonate container of Claim 24, wherein the base is from about 1.1 to about 8 times the thickness of the sidewall.

29. The permaware polycarbonate container of Claim 24, wherein the polycarbonate comprises aromatic homopolycarbonate or aromatic copolycarbonate resins.

30. The permaware polycarbonate container of Claim 29, wherein the polycarbonate has a melt flow rate of 10 to 22 g/10 min.

31. The permaware polycarbonate container of Claim 24, wherein the bottom of said base has integrally molded thereto indicia or a configuration different from the remaining base.

32. A method of forming a container having a wall thickness greater than 50 mils, said container containing sidewalls extending upwardly to a rim and an integrally formed base, comprising:

(a) blowing a parison in a blow mold shaped in the form of said container,

(b) inserting within said blown container a core which presses the base of said container against a mold face having thereon indicia or other structural

configurations so as to mold said indicia or other mold configurations onto the outside surface of said base.

(c) wherein said container is of maximum cross-section intermediate said base and said rim.

33. The process of Claim 32, wherein said parison is formed from a polycarbonate plastic and said parison is blown by directing fluid pressure initially at the top of the parison and directing the fluid pressure from said top toward said base of said parison.

34. A method of forming a container provided with a rim, a base portion and a sidewall therebetween comprising:

(a) injecting molten resin into a mold cavity formed by a mold wall and a core to form a resinous parison on the core;

(b) separating the parison from the mold wall by moving the parison on the core axially in a straight path away from the mold wall;

(c) moving the parison on the core in a substantially arcuate path into axial alignment with a blow mold which is in a side-by-side relationship with the mold cavity;

(d) moving the parison on the core axially in a straight path into the blow mold; and

(e) expanding the parison on the core in the blow mold at a uniform temperature to form a hollow container said resin selected from the group

consisting of filled polystyrene, filled and non-filled polycarbonate, polyethylene terephthalate, polycarbonate and ABS mixtures, acrylic resins, clarified polypropylene and polyvinylchloride,

wherein said container is of maximum cross-section intermediate said rim and said base portion.

35. A method of forming a container provided with a rim, a base portion and a sidewall therebetween comprising:

(a) injecting molten resin into a mold cavity formed by a mold wall and a core to form a resinous parison on the core;

(b) separating the parison from the mold wall by moving the parison on the core axially in a straight path away from the mold wall;

(c) moving the parison on the core in a substantially arcuate path into axial alignment with a blow mold which is in a side-by-side relationship with the mold cavity;

(d) moving the parison on the core axially in a straight path into the blow mold; and

(e) expanding the parison on the core in the blow mold by directing fluid initially at the top of the parison and directing the fluid pressure from said top toward the base of said parison at a uniform temperature to form a hollow container;

said resin selected from the group consisting of polycarbonate, polyethylene terephthalate, polycarbonate and ABS mixtures, acrylic resins, clarified polypropylene and polyvinylchoride, and wherein said container is of maximum cross-section intermediate the nm and base portion.

36. A method of forming a container comprising:

(a) injecting a molten resin composition into a mold cavity formed by a mold wall and a core to form a resinous parison on the core;

(b) separating the parison from the mold wall by moving the parison on the core axially in a straight path away from the mold wall;

(c) moving the parison on the core in a substantially arcuate path into axial alignment with a blow mold which is in a side-by-side relationship with the mold cavity;

(d) moving the parison on the core axially in a straight path into the blow mold; and

(e) expanding the parison on the core in the blow mold at a uniform temperature to form a hollow container, wherein said resin composition is a nanocomposite comprising a matrix polymer and a nano-particle filler.

37. The method according to Claim 36, wherein said matrix resin is polypropylene.

38. The method according to Claim 36, wherein said nanocomposite comprises from about 2 to about 12 percent by weight of nanoparticles.

39. The method according to Claim 38, wherein said nanoparticles have an average size of less than about 2 microns.

40. The method according to Claim 39, wherein said particles are clay particles.

41. An injection blow-molded tumbler exhibiting biaxial toughness formed from a nanocomposite comprising a matrix polymer and a nanoparticle filler comprising:

(a) a base forming the bottom of said tumbler defining an outer edge thereof;

(b) a sidewall integrally formed with said base extending upwardly from the outer edge thereof defining about its upper extremity a fortified rim; and

(c) wherein said fortified rim has a thickness greater than the adjacent portion of said sidewall.

42. The injection blow-molded tumbler according to Claim 41, wherein said matrix resin is polypropylene.

43. The injection blow-molded tumbler according to Claim 41, wherein said nanocomposite comprises from about 2 to about 12 percent by weight nanoparticles.

44. The injection blow-molded tumbler according to 43, wherein said nanoparticles have an average size of less than about 2 microns.

45. The injection blow-molded tumbler according to Claim 44 wherein said nanoparticles are clay particles.

46. The injection blow-molded tumbler according to Claim 41, wherein said nanocomposites comprises from about 3 to about 10 weight percent nanoparticles.

47. The injection blow-molded tumbler according to Claim 46, wherein said nanocomposites comprises from about 4 to about 8 weight percent nanoparticles.

48. The injection blow-molded tumbler according to Claim 47, wherein said nanocomposites comprises from about 4 to about 6 weight percent nanoparticles.

49. The injection blow-molded tumbler according to Claim 48, wherein said nanoparticles have an average size of less than about 2 microns.

50. The injection blow-molded tumbler according to Claim 49, wherein said nanoparticles are clay particles.

51. A method of making an injection blow-molded tumbler comprising:

(a) injection molding a parison from a hydrolysis-stabilized polycarbonte composition;

(b) blow-molding said parison in a blow mold cavity supplied with cooling water maintained at a temperature of at least about 100°F, said cavity be shaped such that said tumbler is provided with a base and a sidewall extending upwardly therefrom; and

(c) recovering said tumbler from said mold.

52. The method according to Claim 51, wherein said cooling water is maintained at a temperature of at least about 125°F.

53. The method according to Claim 51, wherein the sidewall of said tumbler has a wall thickness of at least about 30 mils.

54. The method according to Claim 53, wherein the sidewall of said tumbler has a wall thickness of at least about 40 mils.

55. The method according to Claim 51, wherein said base has a thickness of at least about 40 mils.

56. The method according to Claim 51, wherein said polycarbonate composition contains a stabilizer selected from the group consisting of carboxylic acid stabilizers, carboxylic acid anhydride stabilizers, sulfonic acid stabilizers, sulfonic ester stabilizers, sulfonic acid anhydride stabilizers, polyphenylene sulfide stabilizers and mixtures thereof.